#2

OIPE

RAW SEQUENCE LISTING DATE: 08/02/2001 PATENT APPLICATION: US/09/902,540 TIME: 09:59:06

Input Set : F:\Pa 00359.rpt

Output Set: N:\CRF3\08022001\I902540.raw

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      1 <110> APPLICANT: Goldman, Barry S.
             Hinkle, Gregory J.
             Slater, Steven C.
     3
             Wiegand, Roger C.
      6 <120> TITLE OF INVENTION: Myxococcus xanthus Genome Sequences and Uses Thereof
     8 <130> FILE REFERENCE: 38-10(15849)B
C--> 10 <140> CURRENT APPLICATION NUMBER: US/09/902,540
C--> 10 <141> CURRENT FILING DATE: 2001-07-10
    10 <150> PRIOR APPLICATION NUMBER: 60/217,883
    12 <151> PRIOR FILING DATE: 2000-07-10
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    27 tgcggctcat catgaccatc agggatgacg gctccgtcgc cgaggtgctg cccaccgage
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    29 cggtgggcaa cggcttcgac gaggcggcca tcgcggcggt gcgccagttc cgcttctcgc
    31 ccgccgaggt cgacggcgtg cccgcgccgg tgcaggtgga gtatgtctac cacttcaccc
    33 teacegegee ggageeggag gegggegeeg aggeegtgga ggeegageag cecaaggeea
    35 cgctcaccgg tcagctcatc tcccgcggaa gccgttctcg cgtgcccaac gccaccgtga
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    37 getgeggega ecaegeggae gegeeegagg tgatgteega egaggaegge egetteaege
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    51 agccccatct ggggagttag ttcagttggt tagaacgccg gcctgtcacg ccggaggcca
    53 cgggttcaag tcccgtactc ctcgctagaa agcccagcaa tcctccgggg ttgctgggct
                                                                          180
    55 tttettttte etetgteece etatgtggee teagtgtgee geteeggeae egttggeegg
    57 ageggegtgg egetggaegt egegggeaag geggeggeat eeteegegga eetgegeagt
    59 cgacgtgctc gtggacgggg tccccaccgg gccccaggac gtgatggtcc agtgcccca
    61 gaaggccgag gccctgcagg cgcccctgaa gcggggcgac gtggagctcc ggttccagga
    63 gggccagtgg aaggcctacg acgcggcgaa agcccacctc tccaaggggc gcaagagcga
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76 <223> OTHER INFORMATION: unsure at all n locations

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	teetggageg tgeeetgeee gegegetgge tggeegaege egegetgege accegegeee 180
	tgcgccgctt cctggaagca gggcccgcgc tccgggagat ggggctgatg taccagttgc 240
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	ttctaaaatg ttttctgagc aaattcgttt tggaagatgc atggctgtca tcatgagaac 180
	ctgcagcata tgattttgaa tcatgtcgcg tatggctccc gtatgatcat aataccctgc 240
	acgattttca acaccgactg tttcacttgc tgtaatttgg acattcgcaa tgtgtttgtt 300
	attccacaat gattgcagta cagggttcgt aaattcaagc gcttctaaat tttgcaccat 360
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	acgettecag cegetegttt ggtetaagee gettttttt atatgeageg caattacate 540
	gaagtattet ggtgetaegg acaaataaaa caaaegattt eetttaette tatgagttgt 600
	ttcttgctca ttcacaaget ttagcagetg tttgtaatet tetgttttge ttgegtetae 660
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	cagegtggae atettecagg eggteceggt gggggetgag geeggteega agtacetgeg 180
	caccggcgac ctggggctgc tgctggagga cgggcagctc atcgtcaccg gccggcgcaa 240
	ggacctcate atectgeggg geeggaaeet gtateegeag gaegtggaga geategtgga 300
	gegggeceae egeaaggtge gtecaggetg categeggeg ttegecateg agactecaga 360
	gggcgaggcc ctggcggtgg tcgcggaggt gtcgcgagac gtggcggagg gcgcggaccc 420
	ggccgcgctg ggcgccgtgg cggacacgct gcggaaggcc attgtcgcgg agcttcaggt 480
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Input Set : F:\Pa\_00359.rpt
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172 174 176 178 180 182	tcatgagcgt tattttgctc actacgcatc cgttcattat accatccttt cactattttc accttaccaa agaaaaaatc ttcggatttt ccttcaacta attcttttc cgttccgttt tcaggccaaa cgcatcgatt aatttaactt tttaaatgtg	caacttttgc ctttttttag cgaacgagtt aaatactttg gaaaaacgaa acttcctttt	atccgagatt acatcaaaac ggattcttaa ttttaacgtc cttgtaattc ttacatcttc	cctcctttg taagattgag taaagaacct ttacttttga aaacgactga atcgggggtg	cttatttatc acatacgttc caattcatcg ttaaagttgt aaatcttttt cgctgatcaa	120 180 240 300 360 420 480 540		
186	catagacaat attatcatcc	actttggctt	gtatctcatc	ggtttcattt	tcatagccgg	600		
	cttcataatc attattaagc			taaattcaaa	ttttgcaaaa	660		
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	ccagccggtg ctccaccttg					120		
	tctcctggta gatgcggctc					180		
	tggcgcggta gcggcggcgc					240		
	cgatgccgtg gaagaagcgc					300		
	ggcccagcag cgccttctca					360		
	ccgcgtaggg ctgggacagc					420		
214	cggtgaaggg ccctgcctgg	aactcgaact	cagcctggtt	ggctttcaag	gcggcgttcg	480		
216	cgatcatcca cagtccccca	gcgcggggcc	tcgtccatgg	gattgggccc	gattgtggtg	540		
218	cggcagcatg ccacgaattg	gcgtaccagg	ggggcctgac	acgaaatttt	cattgcggac	600		
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	<211> LENGTH: 704							
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	tatgctgcaa atgctgatga					120		
	tattcgaaac gaaaaaataa					180		
	ggatctagac gttgttcgcg					240		
	gagctacata aatgagcccg					300		
	cagactatat atcgataatt					360		
	aagaatggcg gaaaaagcga					420		
246	gtacttagac aaaggagaaa	caacatctcc	aaatctgttg	atcattgaaa	ttaacccgca	480		
248	cgaaaatatt acgctgcagt	taaacagcaa	aaatccattt	aatcatggtc	atattgagcc	540		
	tgtacaaatt aatttttcag					600		
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	ttgggaatgg gttcagccgc	ttcttgaagc	atttcaggaa	aata		704		
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Input Set : F:\Pa\_00359.rpt
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268	gtatcaacgt cttcttgttc	aatagttgtt	ccgagtaaat	catttacttc	ttcaatcaac	180
270	accttcgcat ctagtacgta	gtgattttca	ttaattttgt	gtacgtccgg	tatttcatca	240
272	tcatcaaatt catcacgaat	ttctccaaca	atttcttcta	aaatgtcttc	aaccgttaca	300
	agccccgttg ttcctccata					360
	attttaagca ataagtcgta	-			•	420
	tacgtttgca cgggacgtgg		_			480
	ttaatattaa ctaatcccac	_		-		540
	gtatattgct ctactctagc	-	-			600
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	gctttttta tgagtttctt					180
	cactcttatc aaggtaattt					240
	gtaagcgact tagatggaac					300
	gacgcactta gtgaacttca					360
	gatacggaaa ttctaaagat					420
	aacggaggat ttgtgtggac	-		-	_	480
	gatttagcgg ttcaacttta					540
	tcaaacgaca cgaattatgt	_	_	-		600
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	ccatctaaaa tcacggttct				cgccccccc	708
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	tctacaatat aatgatcggg		_			180
	tcatcacgaa tttcaccgac					240
	gttccaccgt attcatcaat					300
	aataaatcat gaataggaat	_			_	360
						420
	aaatctattt tttccttgct					480
	accattccaa taatatggtc tcttggacca tctcaaggat					540
		-	-		-	600
	gtacgcggca ccataatctc					
	tatttaaact ccgattgatt					660
	agetettett caetgtgtge				adatadCCCT	720
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Input Set : F:\Pa 00359.rpt

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364 agtattaaaa atcatacaac gaagacagca gtagctgtta ggactatttc agctaaaaaa
                                                                        180
366 cgttttgcgc ttagcggtac gcctattgaa aactcacttg atgagctttg gtcaattttc
368 cagaccattc ttcctggctt atttccaggg cttcgccagt ttaaaaacat gtcatcggag
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370 caggtcagcc gaattgtaag accattttta ctgcgacgag taaaaaaagga tgtgttaaaa
                                                                        360
372 gaactgcctg ataaaattga aaccactcat ttatctgagc tgactaaaga acaaaaagag
374 ttgtatgtag gctatttaga gcagttaaaa tcatctttag ccggtgaaga ttttaataaa
376 aaccgaatga agatettgge gggattaaca agaettegee agatttgetg teateegtee
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378 ctattcgttg aaaattacga aggggattca agcaaattag agcagctgct ggagattaca
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380 agaaatgcgg ttgccaatgg aaaacgcttg ttaatctttt ctcagtttac aagcatgctt
                                                                        660
382 catattatte gagaagaget teaaaaagaa aatetetegt aettttattt agaeggteaa
                                                                        720
384 acqccatcaa aaqaacqagt ggaaatggcg gatcggttta ataatggaga acaagacatt
                                                                        780
386 ttettaattt cattaaaage eggaggeaeg ggtttaaatt taaegggage egataeggtt
388 attttatatg acttatggtg gaaccccgcg attgaagaac aagcggcagg ccgtgcacac
390 cqcattqqac aaaaaaatqt qqtqcaqqtc atcaaqctta tttctcaaqq aaccatcqaa
                                                                        960
392 gaaaaaattt acgccttgca gcaaaagaaa aaagaactca ttgaacaggt tattcagccg 1020
394 ggagaaacaa tgctttctag tttgacagaa gaagagctcc gagaactgct tagtatgtag 1080
396 caaaggatgt gtgaggaatg aaaaaatggg cgtttatatc aaattttgat ggaacgattt 1140
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402 <211> LENGTH: 579
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412 gtagacttcc ttgatgcgct cctcggtggg cgcggggacc ttgtcgtcga tctccgcctt
414 cagatacgcc tcttgggaga ggccgcgctt cttggcctct gcatccacga gcttctccgt
416 caccatgoog tocaggocac getteaggag etgegaette tgetteteea ggttggeeag
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418 eggeteetgg aggegetege tgageteett gtaggtgate ttetgeeegt egeegaaegt
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420 cgcgacgaca gtgtcgggcg cgggctcacc cgcagcctgc tgcgccgcgg gagcggtggc
                                                                       480
422 eggegeette teettigttae ageeggeggt gaaggaggee geeaggageg eegegaggat
424 gacgcggttg ggacggttga gcatatcccg cccacttagc cgagccttac cggacctqca
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426 agttaatgac gtcaggcgac aagcggctcg aagtccagc
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435 <221> NAME/KEY: unsure
436 <222> LOCATION: (1)..(603)
437 <223> OTHER INFORMATION: unsure at all n locations
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## Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

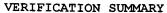
## VERIFICATION SUMMARY

DATE: 08/02/2001 PATENT APPLICATION: US/09/902,540 TIME: 09:59:07

Input Set : F:\Pa 00359.rpt

Output Set: N:\CRF3\08022001\I902540.raw

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L:10 M:270 C: Current Application Number differs, Replaced Current Application No
L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:100 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:459 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14
L:586 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18
L:2213 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:68
L:2666 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:79
L:3179 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:92
L:3706 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:104
L:4113 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:114
L:4926 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:133
L:5221 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:138
L:5462 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:143
L:7583 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:184
L:7826 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:189
L:8659 M:341 W: (46)
                     "n" or "Xaa" used, for SEQ ID#:204
L:8661 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:204
L:8904 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:208
L:9057 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:211
L:9420 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:217
L:10329 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:233
L:11406 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:252
L:12899 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:278
L:13408 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:286
L:13855 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:293
L:13872 M:341 W: (46) "n" or "Xaa" used, for SEQ ID\#:294
L:13918 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:294
L:13995 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:295
L:14104 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:296
L:14169 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:297
L:14171 M:341 W: (46) "n" or "Xaa" used, for SEQ ID\#:297
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L:17046 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:342
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L:17911 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:355
L:18316 M:341 W: (46) "n" or "Xaa" used, for SEQ ID\#:361
L:20945 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:400
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L:24967 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:450
L:25160 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:452
L:25487 M:341 W: (46) "n" or "Xaa" used, for SEQ ID\#:456
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Input Set : F:\Pa\_00359.rpt

Output Set: N:\CRF3\08022001\I902540.raw

L:26054 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:463 L:27385 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:476 L:29220 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:493 L:32115 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:519